

Columbia/Snake Mainstem TMDL

A thick, horizontal yellow brushstroke with a textured, painterly appearance, spanning the width of the slide below the title.

Process and Schedule
August 21, 2002

Geographic Scope



- ⌘ **Columbia River from the Canadian border (RM 745.0) to the Pacific Ocean.**
- ⌘ **Snake River from it's confluence with the Salmon River (RM 188) to it's confluence with the Columbia River (Columbia RM 324.3).**

TMDLs under this effort



- ⌘ **Columbia/Snake River
Mainstem Temperature
TMDL**
- ⌘ **Lower Columbia River Total
Dissolved Gas TMDL**
- ⌘ **Lake Roosevelt/Mid
Columbia/Snake River Total
Dissolved Gas TMDL**

State and Tribal Agencies with a CWA role in the Project Area

States

- ⌘ Idaho Department of Environmental Quality
- ⌘ Oregon Department of Environmental Quality
- ⌘ Washington Department of Ecology

Tribes

- ⌘ Colville Confederated Tribes (EPA promulgated standards)
- ⌘ Spokane Tribe of Indians (tribal approved standards)
- ⌘ Other Columbia Basin Tribes - federal trust responsibility

Roles of Key Players



- ⌘ Oregon and Washington developing dissolved gas TMDL for Lower Columbia - 9/2002
- ⌘ Washington developing dissolved gas TMDL for Mid-Columbia and Lower Snake TMDL - 6/2003
- ⌘ EPA is taking technical lead on temperature TMDL - expected to be completed 6/2003
- ⌘ EPA developing dissolved gas TMDL for portions within tribal waters
- ⌘ EPA in lead to work with tribes

Consultation and Coordination with Columbia Basin Tribes



- ⌘ July 2001 Letter to Tribal Chairs committing to tribal consultation and coordination process and providing an update on process
- ⌘ Grant to National Fish and Wildlife Foundation
 - ⌘ September 2001 Meeting/CRITFC
- ⌘ February 2002 letter to Tribal Chairs notifying them of the opportunity to consult
- ⌘ Contract Support to Upper Columbia Tribes
- ⌘ Other meetings - Spokane, Umatilla

Lake Roosevelt TDG TMDL



- ⌘ "Tribal waters" require EPA to develop this effort
- ⌘ Build upon temperature modeling efforts
- ⌘ Washington Ecology committed to coordinate with the Tribes
- ⌘ Spokane and Colville are key - near term discussions to scope out this effort
- ⌘ Meeting with Bureau at Grand Coulee - November 5/6, 2001
- ⌘ Coordinate with Transboundary Gas Group

Process with State, Tribes and Others



⌘ Monthly Meetings in 2001 and 2002

- ☑ Invite states, tribes and others

- ☑ Good participation

⌘ Technical workgroup - Temperature TMDL

⌘ Meetings with others

- ☑ PUDs, Pulp and Paper, Irrigation Districts

- ☑ Congressional Staff - D.C. and Region

- ☑ Action Agencies - Meeting on Draft Preliminary-
September 4

- ☑ ESA Coordination/Consultation

Public Process



- ⌘ **Pre-decisional informational meetings to share information as TMDLs are developed**
- ⌘ **July 2001 - Spokane and Portland**
- ⌘ **October 2001 - Lewiston and Pasco**
- ⌘ **March 2002 - Vancouver and Toppenish**
- ⌘ **September/October 2002 - Lewiston, Kennewick and Portland**

EPA Website - Public Access



⌘ Extensive compilation of materials

- ☑ Fact Sheets

- ☑ Technical Reports

- ☑ Important Correspondence

- ☑ Public Workshop Summaries

- ☑ Will contain the Draft Preliminary
Temperature TMDL - after 9/13

Temperature TMDL Schedule



- ⌘ September 13 - Draft Preliminary Temperature TMDL
- ⌘ September 25,26 and October 1 - Public workshops
- ⌘ Early November - Draft Temperature TMDL
- ⌘ November - January 2003- 90 day comment period/formal public hearings
- ⌘ February - April 2003 - Respond to comments
- ⌘ May 2003 - Final TMDL

Scope and WQS



- ⌘ Entire Columbia River in the U.S. Snake River from the Salmon River to the Columbia.
- ⌘ WQS allow very small temperature increases over natural temperature due to human activity.
- ⌘ OR WQS for the lower river are the most stringent and drive the TMDL.

Scope and WQS (cont.)



⌘ The TMDL is established to prevent temperature increases greater than 0.14 °C in the lowest reaches when site potential temperature would exceed 20 °C from July through September or 12.8 °C from October through June.

TMDL Allocations



- ⌘ The rivers are divided into 19 reaches.
- ⌘ Each reach receives a gross allocation in terms of temperature increase over site potential.
- ⌘ These allocations are very small (less than 0.01 °C) (see Figure 1).
- ⌘ Dams are allowed no temperature increase over site potential.

TMDL Allocations (cont.)



- ⌘ Point Sources with individual permits are generally allowed their existing discharge.
- ⌘ Point Sources with general permits are allowed their existing discharge.
- ⌘ Tributaries are allowed their existing loads.
- ⌘ Little future growth is available.
- ⌘ When point source permits are re-issued, the facilities may receive tighter limits than in the TMDL after a technology analysis and a mixing zone analysis.

Why no allocation for dams and full allocations for point sources?



- ⌘ Dams have much greater impacts on temperature than point sources.
- ⌘ Limiting point source loads would not benefit the dams.
- ⌘ See Figures 2 and 3.

Impacts to river users



- ⌘ Point sources will receive permit limits for temperature and are at risk of having their loads reduced.
- ⌘ Dams are required to make drastic improvements in their effect on temperature. Puts them between a rock and a hard place.

Possible Issues (cont.)



⌘ Tributaries maintained at existing loads.

⌘ General permits maintained.

⌘ Not all sources of temperature problems are thoroughly evaluated and accounted for in the TMDL

- ☒ Nonpoint sources

- ☒ Tributaries

- ☒ Loss of hyporheic zones

- ☒ Urban heating

- ☒ General permits

Possible Issues (cont.)



- ⌘ Various Technical Issues

- ⌘ One dimensional model

- ⌘ Tributary and boundary conditions

- ⌘ Nothing can be done about dams

What Comes After TMDL?



- ⌘ TMDL provides strong technical/scientific framework for future decisions
- ⌘ Possible Role of EPA - requires Executive involvement
 - ☐ Corps/DOJ - Water Quality Plan
 - ☐ Bureau of Reclamation
 - ☐ Office of Water/CEQ
- ⌘ Decisions should be part of an overall Columbia River Strategy (fish tissue, Superfund, future toxics TMDLs)